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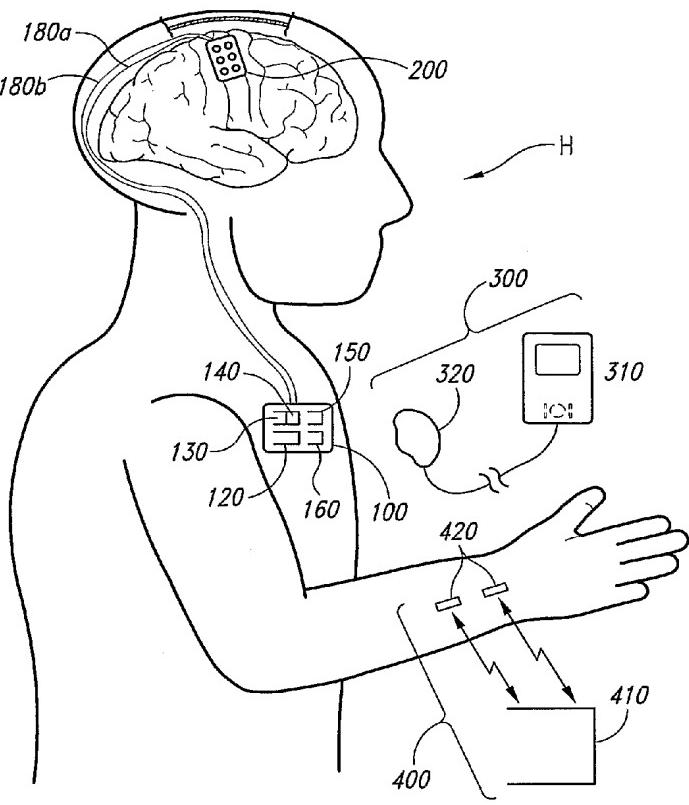
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[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR AFFECTING NEUROLOGIC FUNCTION AND/OR TREATING NEUROLOGIC DYSFUNCTION THROUGH TIMED NEURAL STIMULATION



(57) Abstract: A method of selectively inhibiting or driving neural discharge or activity in or from a specific brain area. One embodiment of a system and/or method directed toward affecting neurologic function may apply conditioning stimuli to a set of target neural populations. The conditioning stimuli are intentionally timed to occur within an inhibitory time domain or a facilitatory time domain relative to intrinsic neural activity associated with a target neural population. The application of a conditioning stimulus within an inhibitory or facilitatory time domain relative to the occurrence of an intrinsic neural discharge may respectively diminish or enhance an outcome associated with the neural discharge. In one embodiment, conditioning stimuli may be produced by a pulse generator coupled to an electrode that is implanted relative to the location of a target neural population. In one embodiment, a conditioning stimulus may be temporally applied relative to the occurrence of an adjunct reference stimulus or signal, which may have an origin that is external or internal to a patient.

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